

**Claims**

1. A method of screening for therapeutic agents useful in the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases, in a mammal comprising the steps of
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- i) contacting a test compound with a RNPEP polypeptide,
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- ii) detect binding of said test compound to said RNPEP polypeptide.
2. A method of screening for therapeutic agents useful in the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases, in a mammal comprising the steps of
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- i) determining the activity of a RNPEP polypeptide at a certain concentration of a test compound or in the absence of said test compound,
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- ii) determining the activity of said polypeptide at a different concentration of said test compound.
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3. A method of screening for therapeutic agents useful in the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases, in a mammal comprising the steps of
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- i) determining the activity of a RNPEP polypeptide at a certain concentration of a test compound,
  - ii) determining the activity of a RNPEP polypeptide at the presence of a compound known to be a regulator of a RNPEP polypeptide.

4. The method of any of claims 1 to 3, wherein the step of contacting is in or at the surface of a cell.
- 10 5. The method of any of claims 1 to 3, wherein the cell is in vitro.
6. The method of any of claims 1 to 3, wherein the step of contacting is in a cell-free system.
- 15 7. The method of any of claims 1 to 3, wherein the polypeptide is coupled to a detectable label.
8. The method of any of claims 1 to 3, wherein the compound is coupled to a detectable label.
- 20 9. The method of any of claims 1 to 3, wherein the test compound displaces a ligand which is first bound to the polypeptide.
10. The method of any of claims 1 to 3, wherein the polypeptide is attached to a solid support.
- 25 11. The method of any of claims 1 to 3, wherein the compound is attached to a solid support.

12. A method of screening for therapeutic agents useful in the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases, in a mammal comprising the steps of
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- i) contacting a test compound with a RNPEP polynucleotide,
- ii) detect binding of said test compound to said RNPEP polynucleotide.
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13. The method of claim 12 wherein the nucleic acid molecule is RNA.
14. The method of claim 12 wherein the contacting step is in or at the surface of a cell.
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15. The method of claim 12 wherein the contacting step is in a cell-free system.
16. The method of claim 12 wherein polynucleotide is coupled to a detectable label.
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17. The method of claim 12 wherein the test compound is coupled to a detectable label.
18. A method of diagnosing a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases, in a mammal comprising the steps of
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- i) determining the amount of a RNPEP polynucleotide in a sample taken from said mammal,
  - ii) determining the amount of RNPEP polynucleotide in healthy and/or diseased mammals.
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19. A pharmaceutical composition for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases, in a mammal comprising a therapeutic agent which binds to a RNPEP polypeptide.
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20. A pharmaceutical composition for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases, in a mammal comprising a therapeutic agent which regulates the activity of a RNPEP polypeptide.
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21. A pharmaceutical composition for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases, in a mammal comprising a therapeutic agent which regulates the activity of a RNPEP polypeptide, wherein said therapeutic agent is
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- i) a small molecule,
  - ii) an RNA molecule,
  - iii) an antisense oligonucleotide,
  - iv) a polypeptide,
  - 30 v) an antibody, or

vi) a ribozyme.

22. A pharmaceutical composition for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases, in a mammal comprising a RNPEP polynucleotide.
23. A pharmaceutical composition for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases, in a mammal comprising a RNPEP polypeptide.
24. Use of regulators of a RNPEP for the preparation of a pharmaceutical composition for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases, in a mammal.
25. Method for the preparation of a pharmaceutical composition useful for the treatment of a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases, in a mammal comprising the steps of
- i) identifying a regulator of RNPEP,
  - ii) determining whether said regulator ameliorates the symptoms of a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neu-

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rological diseases, urological diseases, respiratory diseases, in a mammal; and

iii) combining of said regulator with an acceptable pharmaceutical carrier.

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26. Use of a regulator of RNPEP for the regulation of RNPEP activity in a mammal having a disease comprised in a group of diseases consisting of cardiovascular diseases, cancer, dermatological diseases, hematological diseases, neurological diseases, urological diseases, respiratory diseases.